

Appln No.: 10/605,862  
Amendment Dated: February 13, 2009  
Reply to Office Action of December 4, 2008

### REMARKS/ARGUMENTS

This is in response to the Office Action mailed December 4, 2008 for the above-captioned application. Reconsideration and further examination are respectfully requested.

Applicants note that claim 69 is listed as being considered in the present office action and is rejected under 102(b). The Examiner however has failed to issue a statement indicating that claim 69 (previously in non-elected claim grouping (iv)) has been recombined with elected group (iii) claims. Applicants assume that their previously filed arguments were persuasive and overcame the restriction between groupings (iii) and (iv).

Similarly in accordance with Applicants previously filed remarks, Applicants now cancel claim 70 (which had the same scope as claim 69), since claim 69 has been recombined with claims of grouping (iii). Applicants note that the Examiner failed to address claim 70 in the present office action. Applicants submit that this failure to address claim 70 was because of the Examiner's reliance on said statement.

Applicants have made numerous amendments to the claims. Support for these amendments can be found throughout the specification and no new matter has been added. Claims 24, 46, 47, and 69 have been amended to delete errant periods. Claims 30 and 53 have been amended to delete "or combinations thereof" and to correct a typographical error found in the chemical name. Claims 24-37 and 40-46 have been amended to clarify that the polymer is in "pellet" form. *See* page 15 line 5. Claim 47 has been amended to clarify that the article is a molded article and molded at a temperature of greater than 220 °C. *See* page 14 last line to the first line on page 15. Claim 69 has been amended to clarify that the storage media is a data storage media. *See* page 16 line 8-12. Claim 71 has been added to specify that the data storage media is a CD, CD-R, CD-RW, DVD, DVD-R, DVD-RW, DVD+RW, DVD-RAM, or a high-density DVD. *Id.*

Appln No.: 10/605,862  
Amendment Dated: February 13, 2009  
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**The 112, second paragraph, rejections:**

The Examiner rejects claims 30, 32, 53, and 55 under 35 USC § 112, second paragraph. With respect to claim 30 and 53, Applicants have amended these claims to delete that the phrase "and combinations thereof". The recited compound is one compound and not two as previously claimed.

With respect to the 112 rejections of claims 32 and 55, Applicants remind the Examiner that an rejection for lack of definiteness requires the Examiner to provide some reason why a person skilled in the would be unable to understand the scope of the claim. This has not been done. The Examiner again simply indicates that it is not clear what fluorophore will meet the requirements of an "anti-stokes shift dye." The Examiner then speculates without ANY provided reasoning or explanation that there could be anti-stokes shift dyes that will not work. As to the first issue, as stated in the specification, "anti-stokes shift dyes ... absorb in the near infrared wavelength and emit in the visible wavelength." See page 4 lines 10-11. **This is a characteristic of the dye, and dyes with this property are known.** See attachments. Thus, a person skilled in the art would be able to determine whether a given dye had this characteristic. As to the speculations about operability, this has nothing to do with a definiteness rejection. If the Examiner wishes to present a rejection under the first paragraph of § 112 in a non-final action, supported by reasoned argument as to the reasons for the Examiner's position as required by *In re Bowen*, 492 F. 2d 859, 181 U.S.P.Q. 48 (C.C.P.A. 1974), Applicants will of course respond.

**The provisional-double patenting rejections:**

The Examiner provisionally rejects claims 24-37, 40-60, 63-67, and 69 for obviousness-type double patenting in view of any of three US patent applications (e.g. 10/723,810, 10/889,913, and 11/559,147). Applicants note that US Patent Application Serial No. 10/723,810 is now listed as abandoned. Thus the rejection based on this application is believed to be overcome.

Appln No.: 10/605,862  
Amendment Dated: February 13, 2009  
Reply to Office Action of December 4, 2008

The basis for the Examiner's provisional double-patenting rejection is an unexplained assertion that the claims of this application are not patentably distinct from one another. In an attempt to better understand the Examiner's position the undersigned spoke with the Examiner via telephone on February 9, 2009. The Examiner indicated that it was his position that the claims of the cited references disclosed the same composition and articles as claimed in the presently rejected claims.

A provisional obviousness-type double patenting rejection such as the one issued in this case is only appropriate where conflicting claims between two applications, although not identical, are not patentably distinct and/or are obvious variants. Although the specification of the cited applications may be used to determine the meaning of claim terms, they may not be used as prior art when determining whether the invention defined in a claim would have been an obvious variation of a claim in another application. *See* MPEP Section 804. A non-statutory double patenting rejection is not appropriate between the claims of the cited cases.

Looking at the teachings of the claims of the cited application as compared to the present claims, it is apparent that the Examiner has failed to address all limitations of the presently rejected claims and therefore has failed to provide a *prima facie* rejection. In particular the present application has independent claims 24, 46, 47, and 69. The Examiner fails to address the specific limitations, *inter alia*, found in these claims (and hence all claims of the application) that the tagging material has a temperature stability of at least about 350°C and is present in a sufficient quantity such that the tagging material is detectible via a spectrofluorometer at an excitation wavelength in a range between about 100 nanometers and about 1100 nanometers. With regard to the rejections of claim 64 and 69 the Examiner has failed to address that the article is a data storage medium. Furthermore, Applicants note that they have amended independent claims 24 and 47 to include further limitations relating to the shape of the polymer (e.g. "pellets" in claim 24) and the conditions in which the polymer is molded (e.g. claim 47).

The claims of the 10/889,913 and 11/559,147 applications appear to be directed to a polymer layer, a first tagging material, and a second tagging material. The first and second

Appln No.: 10/605,862  
Amendment Dated: February 13, 2009  
Reply to Office Action of December 4, 2008

tagging material are related such that one of the tagging materials causes an alteration in emission from the other. Applicants submit that the disclosure provided in these claims fails to render the claims of the present application obvious.

The Examiner's statement that the claims of the cited applications disclose the same composition and articles as claimed in the presently rejected claims is, by itself, not sufficient to maintain a *prima face* rejection of the present claims. If the Examiner is to maintain these rejections, Applicants respectfully request the Examiner to provide a detailed explanation as why **ALL** limitations of the present claims would be obvious in view of the teachings provided in the claims of the cited applications.

Failing such a showing by the Examiner, Applicants submit that the provisional double-patenting rejection should be withdrawn. Applicants note that the provisional double patenting rejection is the only pending rejection against claims 31, 33, 34, 54, 56, 57, and 68. Once this rejection is overcome, these claims should be considered "objected to as being dependent upon a rejected base claims, but would otherwise be allowable".

#### **The 102(b) and (e) rejections:**

Applicants previous response and arguments were successful to the extent that the Examiner withdrew his previous 102(b) and 103(a) rejections of the claims. The Examiner now issues a new rejection of claims 24-29, 32, 35-37, 40-52, 55, 58-60, 63-67 and 69 under 102(b) in view of Pavelka (US 5,387,458) and under 102(e) in view of Potyrailo (US 6,538,725).

Applicants have made numerous amendments to the claims of the present application. The amendments and remarks contained herein are believed to overcome the Examiner's rejections of the claims.

Applicants respectfully remind the Examiner for a claim to be anticipated each and every limitation of that claim must be disclosed within a single prior art reference. According to MPEP section 706.02, for anticipation under 102, the cited reference must teach **every** aspect of the claimed invention either explicitly or implicitly. "Moreover, it is **incumbent upon the**

Appln No.: 10/605,862  
Amendment Dated: February 13, 2009  
Reply to Office Action of December 4, 2008

**Examiner** to identify where in each and every facet of the claimed invention is disclosed in the applied reference.” *Ex parte Levy*, 17 USPQ2d 1461, 1462 (POBAI 2003).

The Examiner’s rejection under 102(b) includes two lines of text which read, “Pavelka et al. teach in claim 1 an article comprising a perylene dye on a polycarbonate matrix in the concentration of 0.10-1.0 percent weight.” The Examiner’s rejection under 102(e) likewise includes two lines of text which read, “Potyrailo et al. teach the claimed polycarbonate polymer, the nanoparticles and the claimed luminescent dyes.” If the Examiner is to provide a *prima facie* rejection for anticipation of the claims Applicants respectfully request that he provide citations to where exactly in the reference ALL limitations of the claims may be found. In making the present rejections, the Examiner does not address all limitations of the claims and does not show where in the reference they may be found, and has therefore failed to establish a *prima facie* case for anticipation of the claims. Since the Examiner has failed to provide a *prima facie* case for anticipation in the December 4<sup>th</sup> office action, Applicants submit that if the Examiner determines that a further office action is required that such office action be made non-final.

Of the presently rejected claims, claims 24, 46, 47, and 69 are independent. Applicants have amended claim 24, 46, and 47 to include limitations relating to the shape of the polymer (e.g. a “pellet” in claims 24 and 46) and to the molding conditions used to produce the article (e.g. in claim 47).

Pavelka discloses a polymer sheet having a fluorescent dye and a coating layer that protects the fluorescent dye and polymer from UV degradation. Pavelka’s sheets are disclosed to be the type that are used outside and are subject to UV radiation (e.g. road signs that are exposed sunlight). Pavelka’s dye is disclosed to provide better visibility of the article when illuminated. Pavelka fails to disclose how and under what conditions the polymer sheets are constructed. In other words, Pavelka fails to disclose polymer in “pellet” form, molded polymer articles, and therefore that the polymer is molded at a temperature of greater than 220 °C.

Potyrailo discloses the use of a colometric material in a polymeric material that is applied to a substrate as a coating or film. The coating/film is used to detect structural defects that may

Appln No.: 10/605,862  
Amendment Dated: February 13, 2009  
Reply to Office Action of December 4, 2008

be present in the substrate. Like Pavelka, Potyrailo fails to disclose fails to disclose polymer in “pellet” form, molded polymer articles, and therefore that the polymer is molded at a temperature of greater than 220 °C.

These limitations are not trivial or obvious variants of teachings of either Pavelka or Potyrailo. Polymer “pellets” are supplied by polymer manufactures/suppliers and are used by article manufacturing facilities in molding processes to produce polymer articles. The present invention provides and claims tagged polymers in pellet form and tagged polymers in article form. Tagging the polymer pellets and polymer articles allows for the specific identification of polymers prior to molding, during molding, and after molding occurs. This advancement in identification of polymer compositions is important and is desirable for a variety of applications including recycling, tracking a manufacturing source or manufactured polymer, anti-piracy protection, product quality control, and the like. *See* the Background section of the present invention.

Furthermore, due to the temperature stability (e.g. at least about 350 °C) of the claimed tagging material, the polymer can be treated to molding condition greater than 220 °C without degradation of the tagging material. This allows for the polymer of an article to be identified after it has been molded because the tagging material is still in tact. In another embodiment, if a polymer has “lost” its tag (e.g. the tagging material has become inactive), it could signify that the polymer has been treated to a temperature above that of the temperature stability of the tagging material, thereby indicating a potential loss or reduction in polymer properties (e.g. the polymer has become glassy and/or it has a reduced impact properties, etc.).

Specifically with regard to the anticipation rejection of claims 64 and 69 the Examiner has failed to show that either of the references discloses “a storage medium” as such is claimed in these claims. Applicants note that claim 69 has been amended to read “a data storage medium” which is similar to the language of claim 64. Applicants have also added claim 71 which is dependent upon claim 69 to specify that the data storage medium is a CD, CD-R, CD-RW, DVD, DVD-R, DVD-RW, DVD+RW, DVD-RAM, or a high-density DVD. If the Examiner is to

Appln No.: 10/605,862

Amendment Dated: February 13, 2009

Reply to Office Action of December 4, 2008

maintain that these claims are anticipated by either reference, then Applicants request the Examiner to point to where by column and line number these limitations may be found in either reference.

For these reasons, Applicants submit that the claims of this application are in form for allowance over the cited art. Favorable reconsideration and allowance of all claims are respectfully urged.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Marina T. Larson", written over a horizontal line.

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